

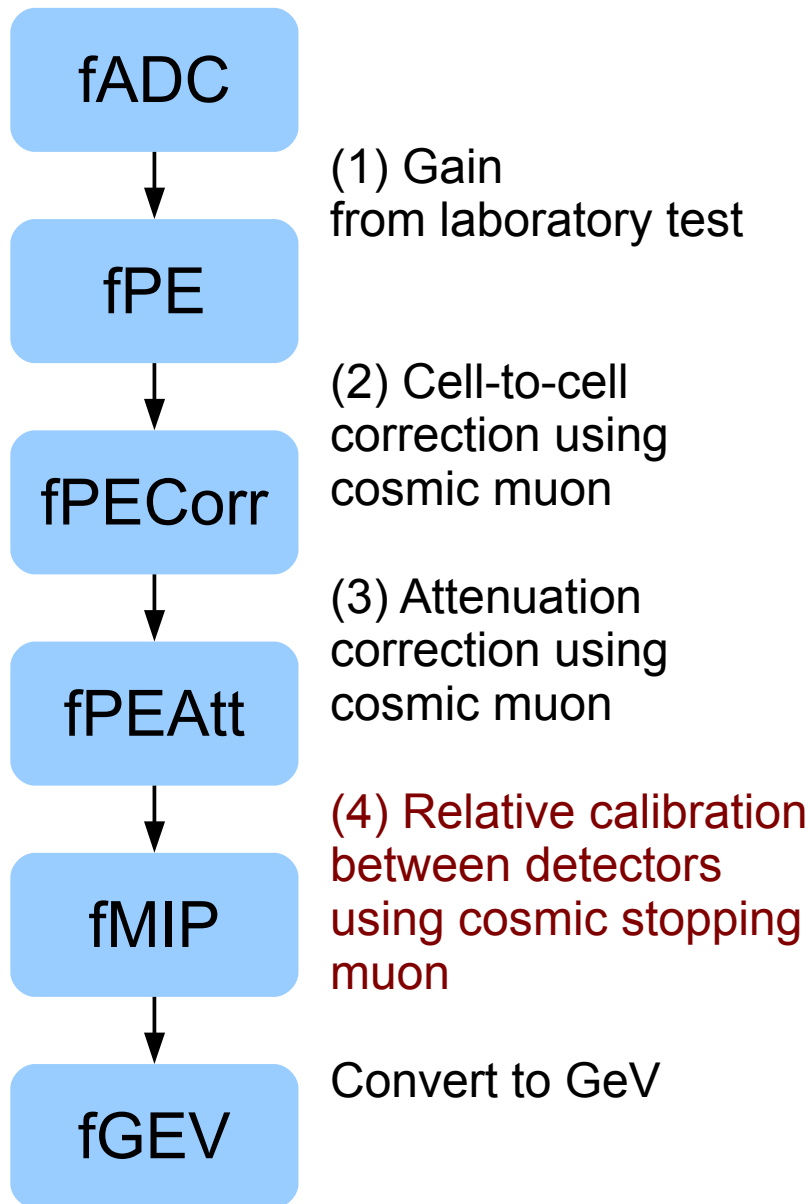
NOvA Calibration

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NOvA Calibration Scheme

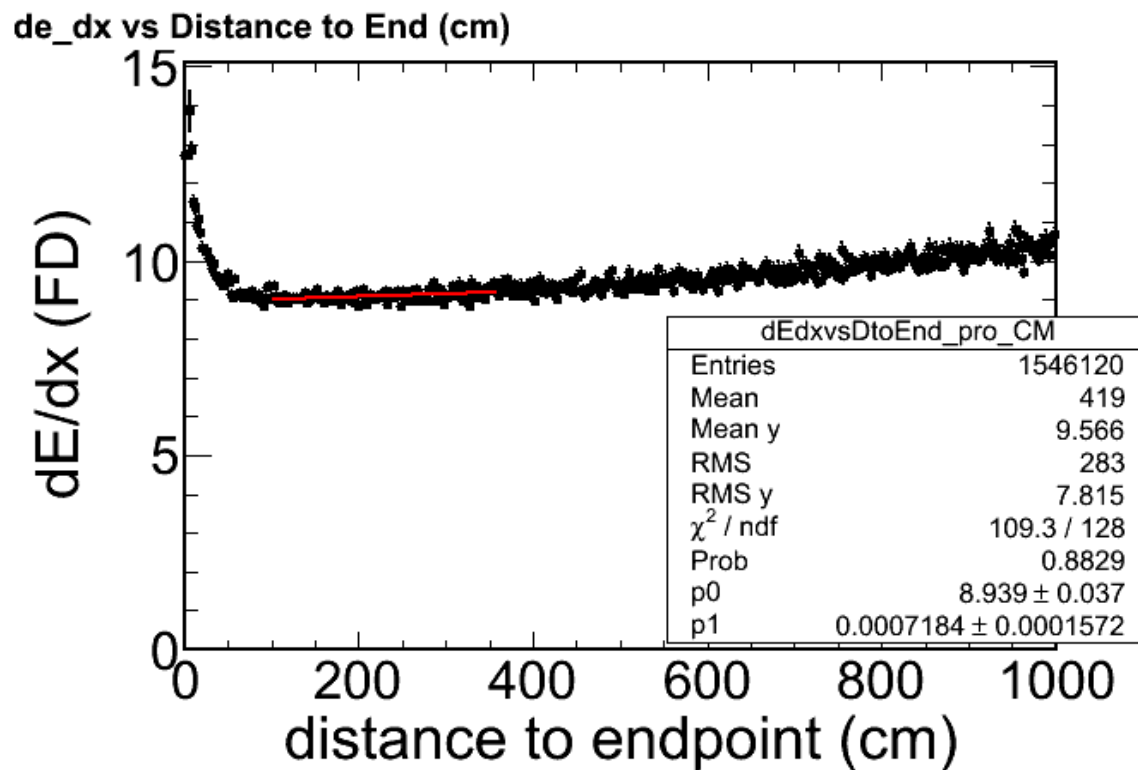


- ♦ The detector records the time and energy information of each cell.
- ♦ Both the time and the energy have to be calibrated.
- ♦ Time calibration synchronizes the time of all the cells.
- ♦ Energy calibration tells the correct energy.

Energy calibration

MEU Calibration

MEU calibration provides relative calibration between detectors.
MEU calibration uses the fact that energy deposit of a muon close to its endpoint changes slowly.



MEU Calibration

MEU is defined as the average energy deposition per plane averaged over a selected window in the cosmic track (track window).

By optimize:

- ♦ the track selection
- ♦ the track window selection
- ♦ path length correction

the energy resolution can be as good as ~20%.

